

Docket No. 1999B060/3

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

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1-13. (Canceled)

14. (Currently Amended) A process of producing an adhesive composition comprising:

- a) reacting propylene and at least one comonomer selected from the group consisting of ethylene and C<sub>4</sub> to C<sub>20</sub>  $\alpha$ -olefins, under polymerization conditions in the presence of a metallocene catalyst capable of incorporating the propylene into isotactic or syndiotactic sequences, in at least one reactor to produce a first copolymer having at least 65 mole % propylene and ~~wherein at least 40% of the propylene sequences are in isotactic or syndiotactic orientations;~~ and

- b) optionally, adding a tackifier;

wherein the first copolymer has a melt index (MI) from about 7 dg/min to about 3000 dg/min according to ASTM D 1238 (B) at 190°C, and wherein the MFR, as measured according to ASTM D 1238 at 230°C, of the first copolymer is greater than 250 dg/min.

15. (Currently Amended) The process of claim 14 further comprising:

- c) reacting propylene and at least one comonomer selected from the group consisting of ethylene and C<sub>4</sub> to C<sub>20</sub>  $\alpha$ -olefins, under polymerization conditions in the presence of a metallocene catalyst capable of incorporating the propylene into isotactic or syndiotactic sequences, in another reactor or subsequent reactors, to produce a second copolymer having at least 65 mol % propylene ~~wherein at least 40 mol % of the propylene sequences are in isotactic or syndiotactic orientations and;~~

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- d) combining the contents of the first reactor with the contents of the subsequent reactors to form a blend, and;
  - e) recovering the blend of step (d), and;  
optionally adding a tackifier at any time in the process.
16. (Previously Presented) The process of claim 14 wherein the first copolymer comprises a semi-crystalline copolymer of propylene and at least one comonomer selected from the group consisting of ethylene and C<sub>4</sub> to C<sub>20</sub>  $\alpha$ -olefins, having a propylene content of greater than 73 mole percent.
- 17-40. (Canceled)
- 41-50. (Withdrawn)
51. (Previously Presented) The process of claim 14 further comprising the step of adding a tackifier at any time in the process.
52. (New) The process of claim 14 wherein the first copolymer has propylene pentad sequences and wherein at least 40% of the propylene pentad sequences are in isotactic or syndiotactic orientations.
53. (New) The process of claim 14 wherein the first copolymer has propylene pentad sequences and wherein more than 80% of the propylene pentad sequences are in isotactic orientation.
54. (New) The process of claim 15 wherein the second copolymer has propylene pentad sequences and wherein at least 40% of the propylene pentad sequences are in isotactic or syndiotactic orientations.

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55. (New) The process of claim 15 wherein the second copolymer has propylene pentad sequences and more than 80% of the propylene pentad sequences are in isotactic orientation.
56. (New) A process of producing an adhesive composition comprising:  
a) reacting propylene and at least one comonomer selected from the group consisting of ethylene and C<sub>4</sub> to C<sub>20</sub>  $\alpha$ -olefins, under polymerization conditions in the presence of a metallocene catalyst capable of incorporating the propylene into isotactic or syndiotactic sequences, in at least one reactor to produce a first copolymer having at least 65 mole % propylene and wherein at least 40% of the propylene pentad sequences are in isotactic or syndiotactic orientations; and  
b) optionally, adding a tackifier;  
wherein the first copolymer has a melt index (MI) from about 7 dg/min to about 3000 dg/min according to ASTM D 1238 (B) at 190°C, and wherein the MFR, as measured according to ASTM D 1238 at 230°C, of the first copolymer is greater than 250 dg/min.
57. (New) The process of claim 56 wherein more than 80% of the propylene pentad sequences are in isotactic orientation.
58. (New) The process of claim 56 wherein the first copolymer comprises a semi-crystalline copolymer of propylene and at least one comonomer selected from the group consisting of ethylene and C<sub>4</sub> to C<sub>20</sub>  $\alpha$ -olefins, having a propylene content of greater than 73 mole percent.